UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,037	04/04/2007	Ulrich Meier	967/44871	5095

23646 7590 11/07/2008

BARNES & THORNBURG LLP
750-17TH STREET NW
SUITE 900
WASHINGTON, DC 20006-4675

EXAMINER	
TIETJEN, MARINA ANNETTE	
ART UNIT	PAPER NUMBER
3753	

MAIL DATE	DELIVERY MODE
11/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,037	MEIER ET AL.	
	Examiner	Art Unit	
	MARINA TIETJEN	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/04/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "spring" in claim 1, the "relief bore" in claim 3, and the "stop" in claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the limitation " the coupler box has a relief bore which leads from the outside into the interior of the receiving bore for the blocking member outside the pressure pipe" means. It is unclear where the relief bore is located.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuthrich (WO02/070941) in view of Feldman (3871522).

Regarding Claim 1, Wuthrich discloses a plug-in safety coupling (Fig. 1) for pressure pipes comprising:

a coupler box 1 (Fig. 1) pivotally mounted therein;

a blocking member 2 (Fig. 1) having a diametrical through bore 20 (Fig. 1) in which a plug 5 (Fig. 1) can be inserted in a depressurized state at an acute to a right

angle with respect to the conducting position and brought into the conducting position by pivoting the plug 5 (Fig. 2);

a cap 9 having a hemispherical front end that is placed over the coupler box 1 with the blocking member 2;

the hemispherical front end having a spherically extending oblong hole 91 (Fig. 12);

However, Wuthrich firstly fails to disclose the cap being a cap-like locking sleeve wherein the locking sleeve is rotatably mounted on the coupler box and actuated by spring so that the locking sleeve's oblong hole extends at an angle with respect to a pivoting plane of the blocking member and the plug, being rotatable against the force of the spring into the pivoting plane of the blocking member and the plug; and secondly, Wuthrich fails to disclose the oblong hole on the hemispherical front end extending along a great circle.

Firstly, Feldman teaches of a cap-like locking sleeve 14 (Fig. 1) being rotatably mounted on a housing 12 (Fig. 1) and actuated by spring 40 (Fig. 3) so that a locking sleeve hole 33 (Fig. 1) is at an angle with respect to a pivoting plane for blocking or allowing access to part 28 (Fig. 1), being rotatable against the force of the spring 40 into the pivoting plane, for the purpose of providing or blocking access through hole 33 of a self-closing safety cap in a simple and inexpensive manner (col. 1, lines 43-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wuthrich's invention, such that the cap were a cap-like locking sleeve wherein the locking sleeve were rotatably mounted on the coupler box

and actuated by spring so that the locking sleeve's hole extended at an angle with respect to a pivoting plane of the blocking member and the plug, being rotatable against the force of the spring into the pivoting plane of the blocking member and the plug, as suggested by Feldman, for the purpose of providing a self-closing safety cap providing closeable access to the coupled part that is simple, inexpensive to manufacture and easy to use.

Secondly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the length of the oblong hole in the hemispherical front end of the cap-like locking sleeve, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

Regarding Claim 2, Wuthrich taken with Feldman discloses the invention as essentially claimed, except for the cap-like locking sleeve is mounted for rotation by 90° on the coupler box and is actuated by the spring such that its oblong hole extends at an angle of 90° with respect to the pivoting plane of the blocking member and the plug and is rotatable against the force of the spring into the pivoting plane of the blocking member and the plug. Feldman's cap 14 (Fig. 1) does not rotate a full 90°.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the cap rotatable up to 90°, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding Claim 3, as best understood, Wuthrich discloses the coupler box has a relief bore 19 (Fig. 1) which leads from the outside into the interior of the receiving bore 20 for the blocking member 2 outside the pressure pipe 5.

Regarding Claim 4, Wuthrich discloses the invention was essentially claimed, except for a stop is formed inside the locking sleeve and at the opposite outer side of the coupler housing, so that the rotation of the spring loaded locking sleeve abuts a stop when its oblong hole comes to lie on the front side of the blocking member in the coupler housing.

Feldman teaches a stop 26, 36 (Fig. 3) formed inside the locking sleeve 32 (Fig. 3) and at the opposite outer side of the coupler housing 20 (Fig. 1) for the purpose of limiting the rotation of the spring loaded locking sleeve so the sleeve hole comes to lie on the front side of the hole 28 (Fig. 1) in the housing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wuthrich's invention to include a stop is formed inside the locking sleeve and at the opposite outer side of the coupler housing, so that the rotation of the spring loaded locking sleeve abuts a stop when its oblong hole comes to lie on the front side of the blocking member in the coupler housing, as suggested by Feldman, for the purpose of limiting the rotation of the spring loaded locking sleeve so the sleeve hole comes to lie on the front side of the hole in the housing.

Regarding Claims 6-9, Wuthrich discloses the invention as essentially claimed except for the locking sleeve to be made of sheet steel, sheet aluminum, aluminum, plastic, or brass.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to be made of sheet steel, sheet aluminum, aluminum, plastic, or brass, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

3. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuthrich (WO02/070941) in view of Smith et al. (2493271).

Regarding Claims 5 and 10, Wuthrich discloses the invention as essentially claimed, except for the plug has a projection with a chamfered shoulder which slides under an oblong hole in the coupler box when the plug is inserted in the bore and rotated, wherein the oblong hole defines the pivoting plane of the blocking member and plug.

Smith et al. teach a plug having a projection with a chamfered shoulder 21 (Fig. 3) which slides under an oblong hole 22 (Fig. 3) in a coupler box 5 (Fig. 3) when a plug 16 (Fig. 1) is inserted in a bore 23 (Fig. 3) and rotated for the purpose of guiding and retaining the plug in proper position (col. 2, lines 42-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wuthrich's invention such that the plug includes a projection with a chamfered shoulder which slides under the oblong hole in the coupler box when the plug is inserted in the bore and rotated, as taught by Smith et al., for the purpose of guiding and retaining the plug in proper position.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARINA TIETJEN whose telephone number is (571) 270-5422. The examiner can normally be reached on Mon-Thurs, 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GREG HUSON can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Rivell/
Primary Examiner, Art Unit 3753

/M. T./
Examiner, Art Unit 3753